

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
16 August 2001 (16.08.2001)

PCT

(10) International Publication Number  
**WO 01/58546 A1**

(51) International Patent Classification<sup>7</sup>: **A63F 5/04**,  
13/00, G07F 5/22, 17/34, G06F 161/00

(21) International Application Number: PCT/AU01/00044

(22) International Filing Date: 18 January 2001 (18.01.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PQ 5564 11 February 2000 (11.02.2000) AU

(71) Applicant (for all designated States except US): **ARIS-  
TOCRAT TECHNOLOGIES AUSTRALIA PTY LTD**  
[AU/AU]; 71 Longueville Road, Lane Cove, New South  
Wales 2066 (AU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BENNETT, Nicholas,  
Luke** [AU/AU]; C/-71 Longueville Road, Lane Cove,  
NSW 2066 (AU).

(74) Agent: **F B RICE & CO**; 605 Darling Street, Balmain,  
NSW 2041 (AU).

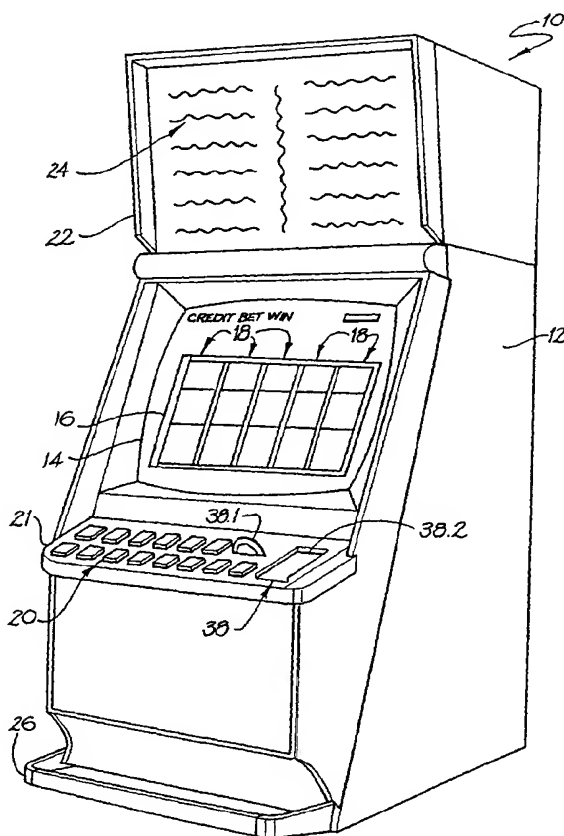
(81) Designated States (national): AU, JP, NZ, US, ZA.

**Published:**

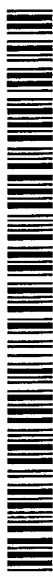
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GAMING MACHINE WITH INTERACTIVE BONUSING



(57) Abstract: A gaming machine (10) has a display (14) and a game controller (30) arranged to control images (18) on the display (14). The game controller (30) is arranged to play a game (16) wherein one or more random events are caused to be displayed on the display (14) and, if a predefined winning event or combination of events results, the machine (10) awards a prize. A predetermined symbol from a set of symbols of the game is selected as a bonus symbol. The display (14) is an interactive display means such that, when at least one of the bonus symbols appears then, by a player touching a part of the display (14) overlying the, or each, occurrence of the bonus symbol, a bonus prize is revealed in respect of the, or each, bonus symbol.



WO 01/58546 A1

## *Gaming machine with interactive bonusing*

### **Field of the Invention**

This invention relates to a gaming machine. More particularly, the invention relates to a gaming machine and to an improvement to a game played on such a gaming machine.

### **Background to the Invention**

Players who regularly play gaming machines quickly tire of particular games and therefore it is necessary for manufacturers of these machines to develop innovative game features which add interest to the games. In so doing, it is hoped to keep players amused and therefore willing to continue playing the game as well as to attract new players.

Also, with the growth that has occurred in the gaming machine market, there is intense competition between manufacturers to supply various existing and new venues. When selecting a supplier of gaming machines, the operator of a venue will often pay close attention to the popularity of various games with their patrons. Therefore, gaming machine manufacturers are keen to devise games which are popular with the players as a mechanism for improving sales, retaining customers and attracting new customers.

### **Summary of the Invention**

According to the invention, there is provided a gaming machine having a display means and a game control means arranged to control images displayed on the display means, the game control means being arranged to play a game wherein one or more random events are caused to be displayed on the display means and, if a predefined winning event or combination of events results, the machine awards a prize, the gaming machine being characterised in that a predetermined symbol from a set of symbols of the game is selected as a bonus symbol and in that the display means is an interactive display means such that, when at least one of the bonus symbols appears then, by a player touching a part of the display means overlying the, or each, occurrence of the bonus symbol, a bonus prize is revealed in respect of the, or each, bonus symbol.

The set of symbols may be a set of standard symbols of the game or a predetermined subset of that set of standard symbols.

The, or each bonus symbol may be revealed in an animated manner such as the symbol which was touched by the player transforming into another symbol or indicium representative of a prize.

5 Further, it is to be understood that, in this specification, the term "symbol" relates to a symbol on a spinning reel-type game and, more particularly, a video simulation of such a spinning reel game, a card of a card game, a ball of a Keno game, or the like.

10 The feature may be applicable in respect of a base game. Instead, or in addition, the feature may be applicable in respect of a feature game which is triggered upon fulfilment of predetermined conditions. For example, in respect of a spinning reel-type game, the feature game may be triggered upon the occurrence of three predetermined special symbols.

15 The feature allowing the player to touch the screen to reveal the, or each, bonus symbol may be triggered by a predetermined event. Then, after the predetermined event has occurred, the control means may select a symbol from the set of symbols, or the subset of the set of symbols, to be the bonus symbol. Instead, the feature allowing the player to touch the screen to reveal the, or each, bonus symbol may be applicable for all games played.

20 In another embodiment, the, or each, bonus symbol may be selected by the player.

### **Brief description of the drawings**

The invention is now described by way of example with reference to the accompanying diagrammatic drawings in which:-

25 Figure 1 shows a three dimensional view of a gaming machine, in accordance with the invention;

Figure 2 shows a block diagram of a control circuit of the gaming machine;

30 Figures 3a to 3d show display screens of a first embodiment of a game played on the gaming machine of Figure 1;

Figures 4a to 4h show display screens of a second embodiment of a game played on the gaming machine;

Figure 5 shows a flow chart of the game of Figure 3; and

Figure 6 shows a flow chart of the game of Figure 4.

### Detailed Description of the Drawings

In Figure 1, reference numeral 10 generally designates a gaming machine, including a game, in accordance with the invention. The machine 10 includes a console 12 having a video display unit 14 on which a game 16 is displayed, in use. The game 16 is a spinning reel game which simulates the rotation of a number of spinning reels 18. A keypad 20, arranged on a midtrim 21 of the console 12, facilitates playing of the game 16.

The machine 10 includes a top box 22 on which artwork 24 is carried. The artwork 24 includes paytables, details of bonus awards, etc.

A coin tray 26 is mounted beneath the console 12 for cash payouts from the machine 10.

Referring now to Figure 2 of the drawings, a control means or control circuit 30 is illustrated. A program which implements the game and user interface is run on a processor 32 of the control circuit 30. The processor 32 forms part of a controller 34 which drives the screen of the video display unit 14 and which receives input signals from sensors 36. The sensors 36 include sensors 36 associated with the keypad 20 and touch sensors mounted in a screen of the video display unit 14.

The controller 34 also receives input pulses from a mechanism 38 indicating that a player has provided sufficient credit to begin playing. The mechanism 38 may be a coin input chute 38.1 (Figure 1), a bill collector 38.2, a credit card reader (not shown), or any other type of validation device.

Finally, the controller 34 drives a payout mechanism 40 which, for example, may be a coin hopper for feeding coins to the coin tray 26 to pay a prize once a predetermined combination of symbols carried on the reels 18 appears on the screen 16 or some other prize winning event occurs.

With a game played on the gaming machine 10 of the invention, for example, a spinning reel game, a bonusing feature is triggered by a pre-determined event or, instead, may exist for all games played. For ease of explanation, the invention will be described below with reference to its application to a spinning reel type game. It will, however, be appreciated that the invention is applicable to other gaming machine games such as card games, ball-type games such as Keno games, or the like.

In use, the game commences in a conventional way upon actuation of the game via the keypad 20. The player is given the opportunity to touch one or more of the standard symbols on the actual reels 18 and, if necessary, is

prompted to do so. When the player touches the screen overlying the appropriate symbols, this is sensed by the sensors 36 of the screen. The sensors 36 send the appropriate command to the processor 32. The processor 32 then causes prizes to be revealed in the same location as the touched symbol by way of an animation technique which transforms the symbol to a win-indicating indicium or by using some other, similar method. Similarly, the symbol may transform into something other than an indicium representing a win. For example, the symbol may transform into one representing another bonus symbol.

A first embodiment of the game 16 is now described with reference to Figures 3a to 3d of the drawings. In this embodiment, the result of a base game is shown in Figure 3a of the drawings. While this embodiment is described with reference to the game 16 being a base game, it will be appreciated that the game 16 could also be a feature game resulting from a base game.

One of the symbols is designated as a bonus symbol. The designation of the bonus symbol could occur randomly or by some predetermined process. Instead, the bonus symbol may be selected by the player. A further possibility is that the bonus symbol may be fixed in that the same symbol is always the bonus symbol for every base game or feature game, as the case may be.

In the embodiment illustrated in Figures 3a to 3d of the drawings, the J symbol 42 is selected as the bonus symbol. When the screen of Figure 3a is displayed, the player touches the screen of the video display unit 14 overlying one of the J symbols 42 to reveal a first bonus prize 44, as illustrated in Figure 3b of the drawings. The screen overlying a second of the J symbols 42 is then touched by the player to reveal a second bonus prize 46 as illustrated in Figure 3c of the drawings. The screen overlying the third J symbol 42 is touched by the player to reveal a final bonus prize 48.

Referring now to Figures 4a to 4h of the drawings, a second embodiment of the game 16 is illustrated. In this embodiment, the screen display illustrated in Figure 4a of the drawings is the result of a base game. The presence of 3 S symbols 50 causes a second screen feature game to commence having a screen display 52 as shown in Figure 4b of the drawings. It is to be noted in Figure 4b of the drawings that the initial screen display 52 of the second screen feature game comprises three rows 54, 56 and 58 of

symbols. The symbols in the row 54 are, initially, visually the same as each other. Similarly, the symbols in the row 56 are, initially, visually the same as each other and the symbols in the row 58 are also, initially, visually the same as each other.

5           When the screen display 52 occurs, the player touches the screen overlying one symbol from each row 54, 56 and 58. Hence, when the player touches the screen overlying one of the symbols in the row 54, the selected symbol transforms into a free game indicator as shown at 60 in Figure 4c of the drawings. This indicates to the player the number of free games which  
10           the player has won.

          The player then touches the screen overlying one of the symbols in the row 56. The selected symbol transforms itself as shown at 62 in Figure 4d of the drawings to reveal a free game multiplier. The multiplier shows the number by which all wins will be multiplied during the sequence of free  
15           games.

          Finally, the player touches the screen overlying one of the symbols in the row 58 to cause the selected symbol to transform itself into a symbol 64 as shown in Figure 4e of the drawings. This symbol 64 indicates to the player which symbol in the free games which will follow will be a bonus symbol.

20           Upon completion of the steps shown in Figures 4c to 4e of the drawings, a series of free games commences. The number of free games which the player is awarded is as indicated by the symbol in the row 54 of the second screen 52 revealed by the player having touched that part of the screen.

25           The screen of one of the free games is shown in Figures 4f to 4h of the drawings and is designated generally by the reference numeral 66.

          When the reels 18 of the first free game cease spinning to reveal the screen 66, after all applicable wins have been paid and have been multiplied by the multiplier of the selected symbol in the row 56 of the initial screen display of the second screen feature 52, the player touches the screen  
30           overlying the first special symbol 68 to reveal what bonus prize has been awarded. As shown in Figure 4g, a bonus prize of ten credits is awarded. The player then touches the screen overlying the second special symbol 70 to reveal a further bonus prize as illustrated in Figure 4h of the drawings.

The free games continue in this manner until all the free games have been awarded after which the game returns to the normal spinning reel game without bonuses until the next feature is triggered.

5 Hence, it is an advantage of the invention that a gaming machine 10 is provided with more player interaction which, the applicant believes, will result in greater player interest.

10 It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

## CLAIMS:

1. A gaming machine having a display means and a game control means arranged to control images displayed on the display means, the game control means being arranged to play a game wherein one or more random events are caused to be displayed on the display means and, if a predefined winning event or combination of events results, the machine awards a prize, the gaming machine being characterised in that a predetermined symbol from a set of symbols of the game is selected as a bonus symbol and in that the display means is an interactive display means such that, when at least one of the bonus symbols appears then, by a player touching a part of the display means overlying the, or each, occurrence of the bonus symbol, a bonus prize is revealed in respect of the, or each, bonus symbol.
2. The gaming machine of claim 1 in which the, or each, bonus symbol is revealed in an animated manner.
3. The gaming machine of claim 1 or claim 2 in which the interactive display means is applicable in respect of a base game.
4. The gaming machine of any one of the preceding claims in which the interactive display means is applicable in respect of a feature game which is triggered upon fulfilment of predetermined conditions in a preceding base game.
5. The gaming machine of any one of the preceding claims in which the feature allowing the player to touch the screen to reveal the, or each, bonus symbol is triggered by a predetermined event.
6. The gaming machine of claim 5 in which, after the predetermined event has occurred, the control means selects a symbol from a set of the symbols to be the bonus symbol.
7. The gaming machine of any one of claims 1 to 4 inclusive in which the feature allowing the player to touch the screen to reveal the, or each, bonus symbol is applicable for all games played.



8. The gaming machine of any one of claims 1 to 5 inclusive or claim 7 in which the, or each, bonus symbol is selected by the player.

1/8

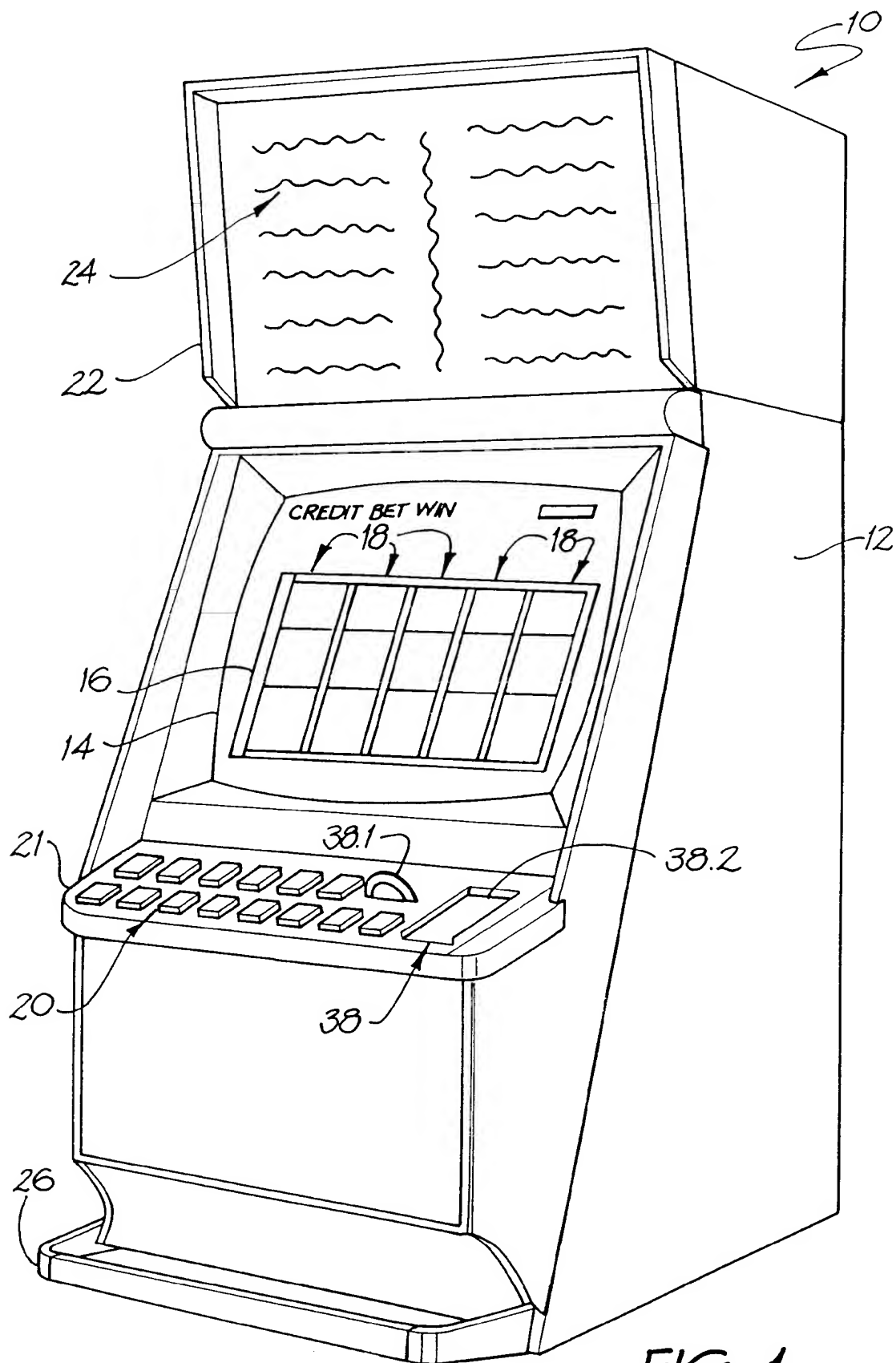
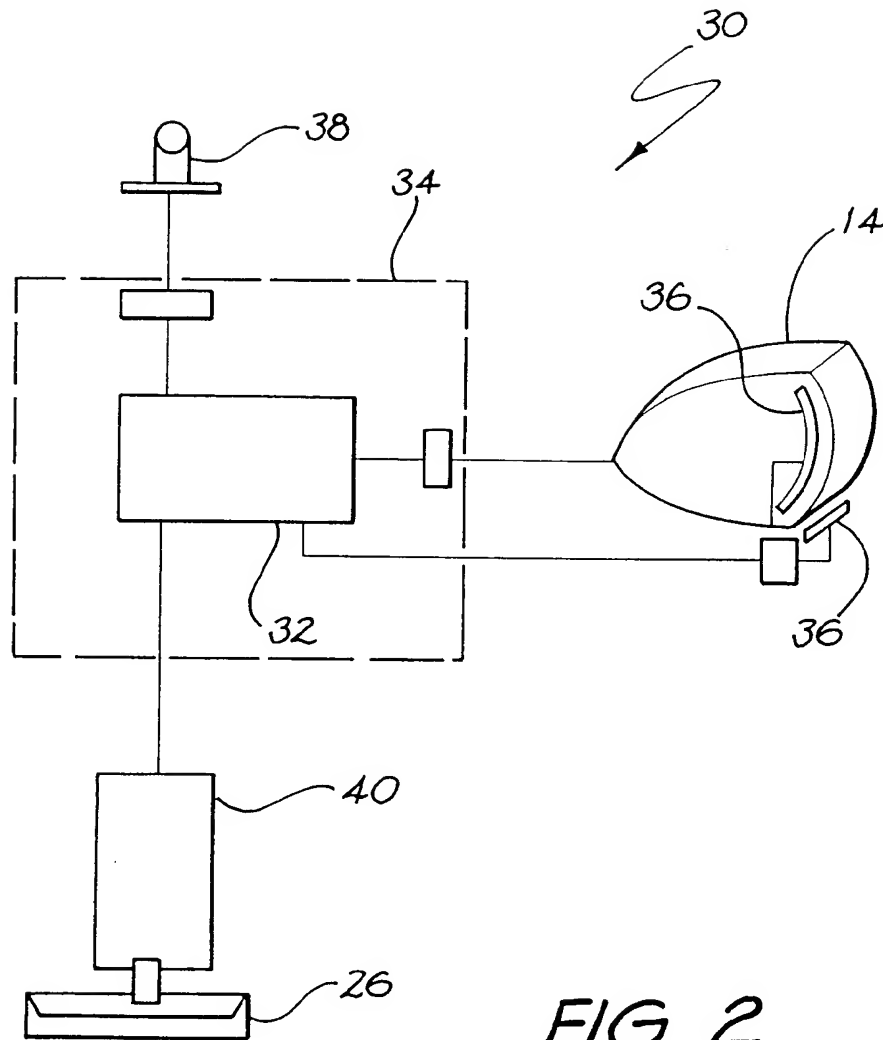
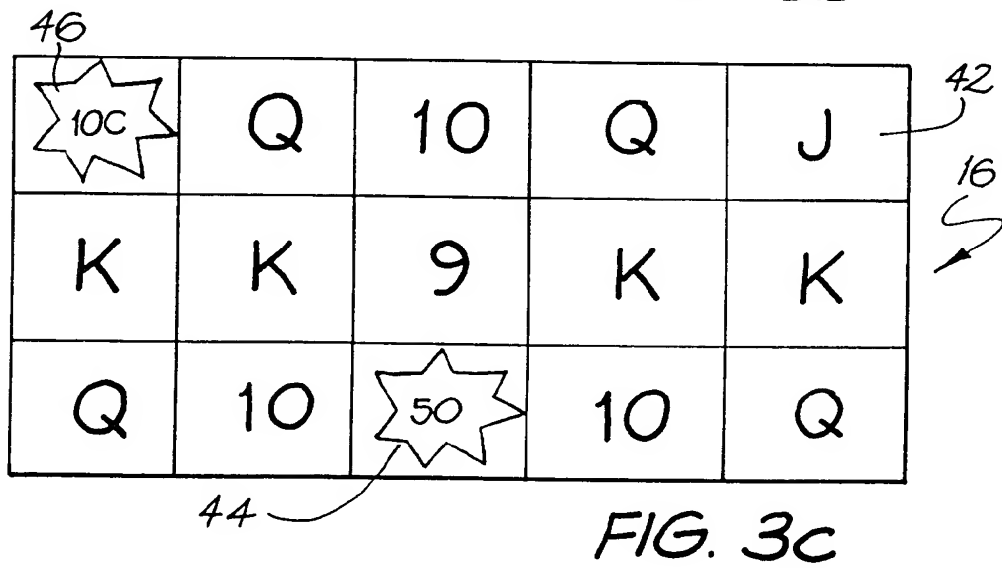
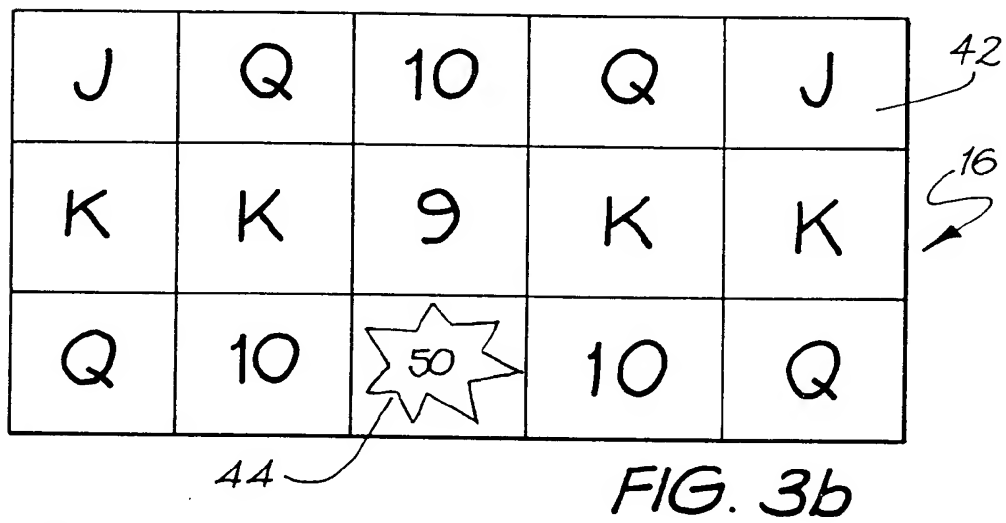
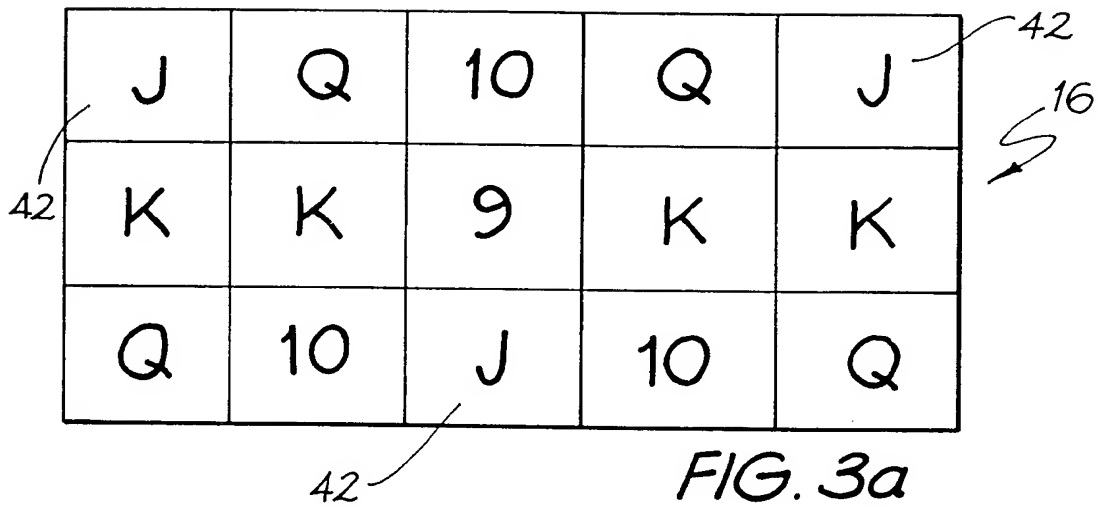


FIG. 1

2/8



3/8



4/8

100	Q	10	Q	20
K	K	9	K	K
Q	10	50	10	Q

46 48 16 44

FIG. 3d

J	Q	10	S	J
K	S	9	K	S
Q	10	J	10	Q

50 16 50

FIG. 4a

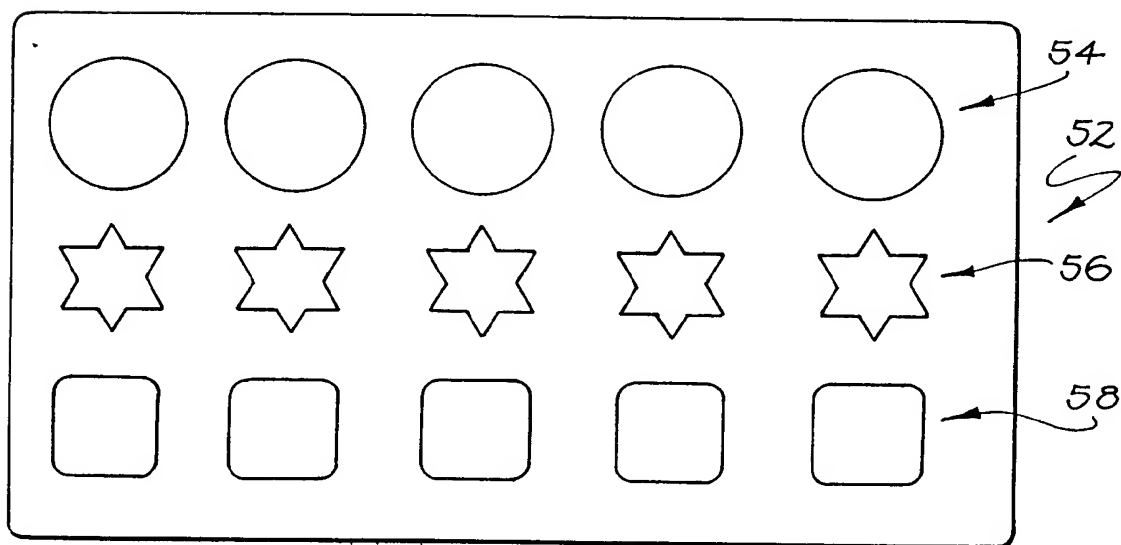


FIG 4b

5/8

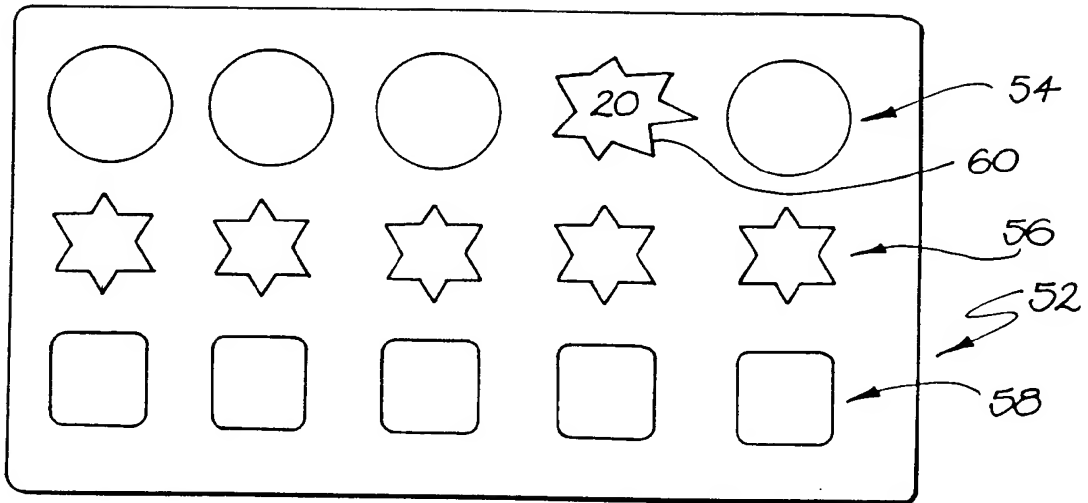


FIG. 4c

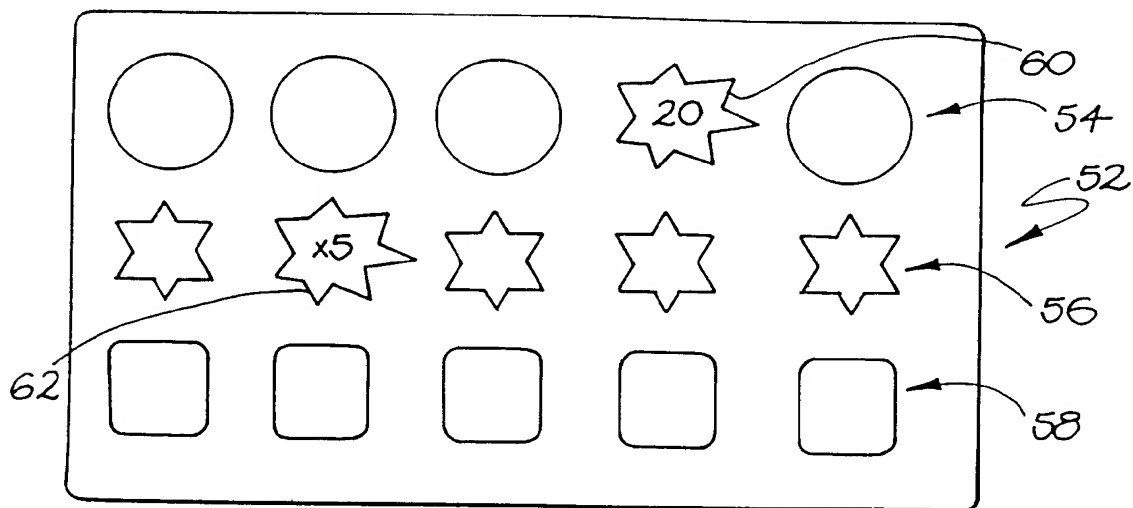


FIG. 4d

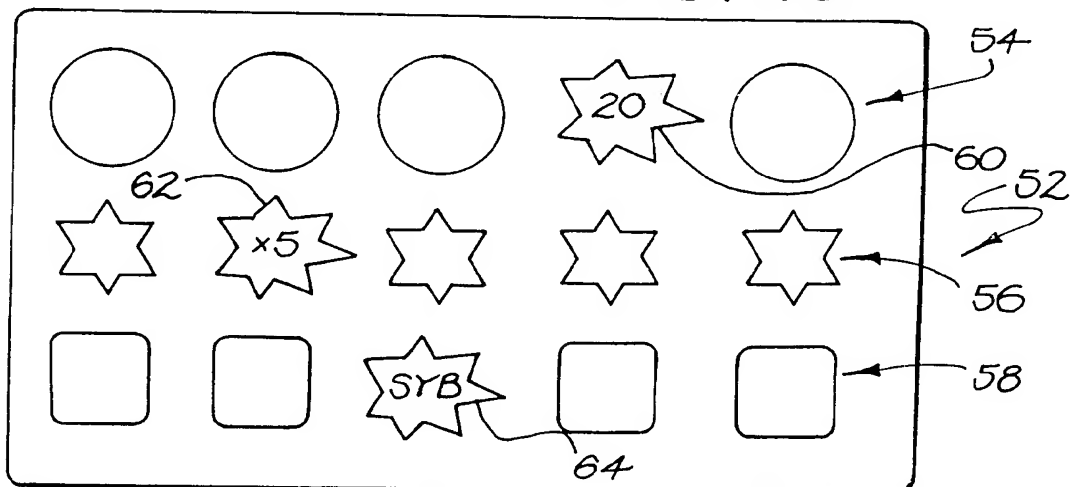


FIG. 4e

6/8

J	J	10	Q	J
K	SYB	9	K	9
Q	10	J	10	SYB

66

68

70

FIG. 4f

J	J	10	Q	J
K	10	9	K	9
Q	10	J	10	SYB

66

68

70

FIG. 4g

J	J	10	Q	J
K	10	9	K	9
Q	10	J	10	5000

66

68

70

FIG. 4h

7/8

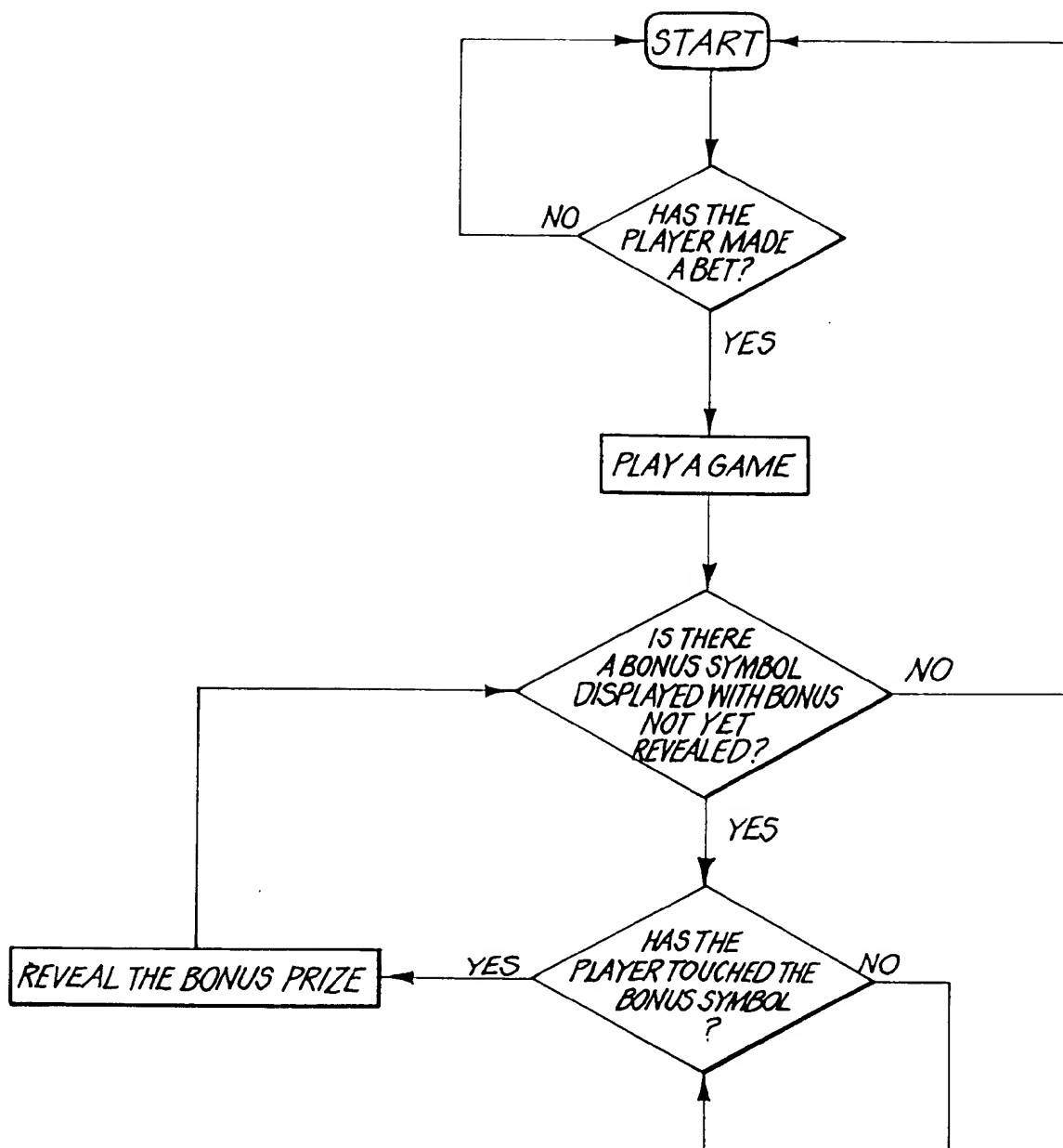


FIG. 5



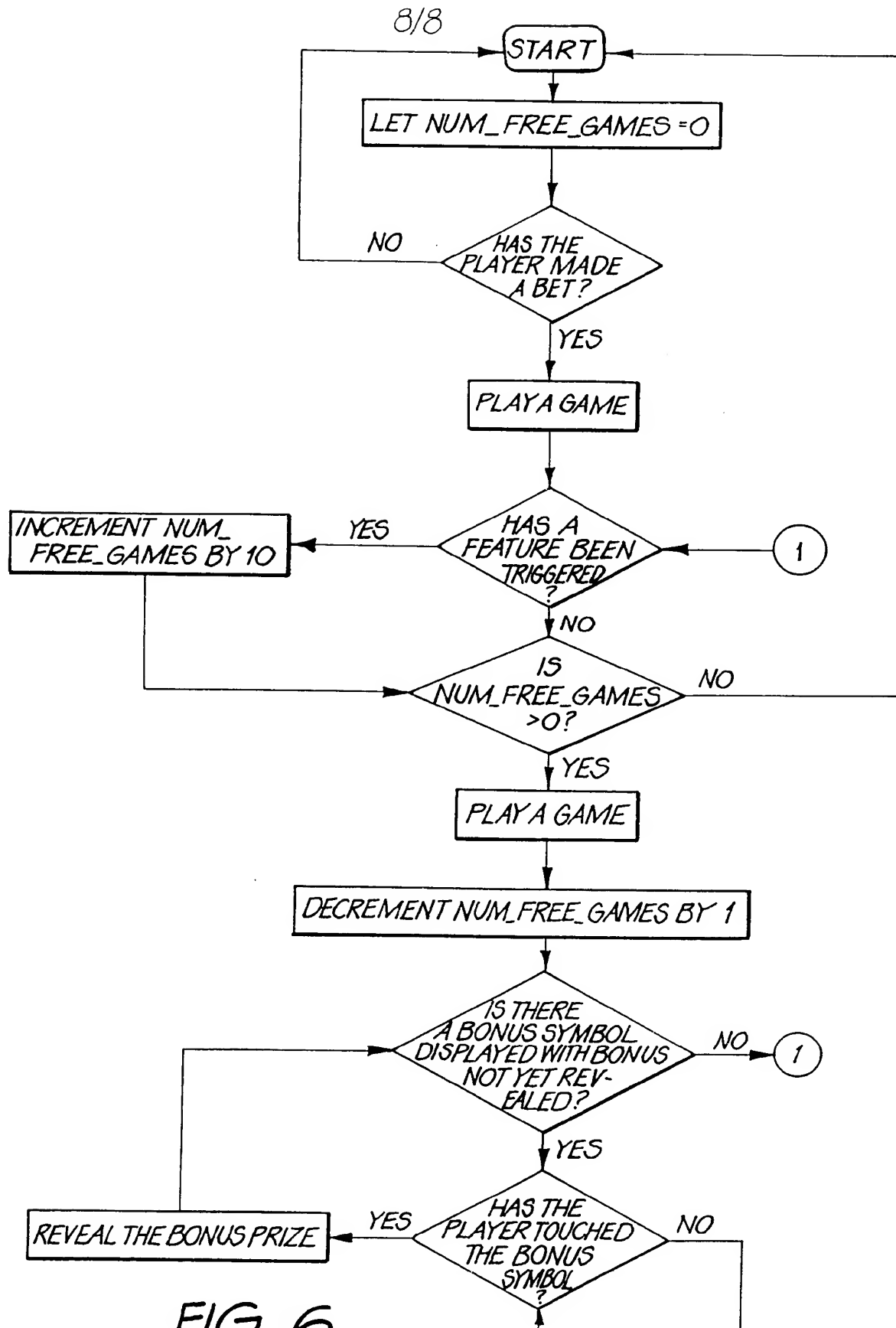


FIG. 6

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU01/00044

**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: A63F 5/04, 13/00; G07F 5/22, 17/34; G06F 161:00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC AS ABOVE

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI : Keywords: (slot, fruit, gaming, poker ) machine, interactive, touch, bonus, extra. second chance. prize, random, score, display.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	AU 17318/99 A (ARISTOCRAT LEISURE INDUSTRIES PTY LTD) 9 September 1999 Whole document	
A	US 5722891 A (INOUE) 3 March 1998 Whole document	
A	WO 98/09259 A (ARISTOCRAT LEISURE INDUSTRIES PTY LTD) 5 March 1998 Whole document	

☐ Further documents are listed in the continuation of Box C
 ☒ See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

9 March 2001

Date of mailing of the international search report

16 March 2001

Name and mailing address of the ISA/AU

 AUSTRALIAN PATENT OFFICE  
 PO BOX 200, WODEN ACT 2606, AUSTRALIA  
 E-mail address: pct@ipaustalia.gov.au  
 Facsimile No. (02) 6285 3929

Authorized officer

D.R. LUM

Telephone No : (02) 6283 2544

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/AU01/00044**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
AU	17318/99	NONE					
US	5722891	CA	2140949	JP	7275432		
WO	9809259	AU	39339/97				
END OF ANNEX							